Mahr

Surface roughness measuring instrument, Type: M400



Order data

Order number	499041 M400
GTIN	2050001958433
Item class	43C

Description

Version:

Surface roughness measuring tool with free probe travel and automatic zeroing for precise roughness and wave measurement in accordance with relevant standards. The wireless Bluetooth connection between the evaluation unit and feed unit offers high flexibility when performing a wide variety of measurement tasks. Alternative operation with USB cable connection. The user can use the feed unit to work directly at the point of measurement whilst the evaluation unit stands in a suitable place. The measurement can be started at the evaluation unit or at the feed unit. Several feed units can be connected to a single evaluation unit and can be controlled selectively.

- Free probe travel with high-precision probe system.
- $\cdot\,$ Quick-change probe arm using magnetic probe arm lock.
- · Protected against damage.
- Only a few seconds set-up time using motorised height adjustment of the feed unit with automatic zeroing.
- Probe travel to DIN EN ISO 4288 / ASME B46.1: 0.48 mm, 0.56 mm, 1.5 mm, 1.75 mm, 4.8 mm, 5.6 mm, 15 mm, 17.5 mm automatically and variably adjustable to EN ISO 12085 (MOTIF): 1 mm, 2 mm, 4 mm, 8 mm, 12 mm, 16 mm, variably adjustable.
- Number of traverse lengths selectable from 1 to 5.
- · Automatic selection of filters and probe travels to the standard.
- Measurement travel for longitudinal sensing 0.1 to 26 mm.
- Phase correction Gauss filter to DIN EN ISO 16610-21 (supersedes DIN EN ISO 11562) and special filter ISO 13565-1.
- · Flexible movement using cordless Bluetooth connection.
- · Clear, direct, and simple brilliant colour display for operation and displaying results.

Data sheet

- $\cdot\,$ Portable use with mains and battery power.
- International up to date incorporating all the usual reference values to DIN/ISO, JIS, ASME, MOTIF in multiple languages.
- Documentation with quality with integral thermal printer for printing out the profile and results.
- · Report of date and/or time of measurements.
- Integral memory for results of about 40,000 measurements and 30 profiles.
- High measurement speed, 1mm/s at the same measuring point density.
- · Saving measurement programs.

Supplied with:

MarSurf M400 evaluation unit, MarSurf SD26 feed unit including BFW250 probe system, standard probe arm, 1 roll thermal paper No. 499510 size H1, wide-range mains adapter with 3 plugs, 2×USB cables (for connection to the PC and operation with cable), user manual, and transport case.

Spare part:

Battery No. 499549.

Note:

Other contact arms and probes, e.g. for small bores and slots, available on request.

Technical description

Evaluation unit length190 mmEvaluation unit height75 mmEvaluation unit height50 mmFeed unit height0.08; 0.25; 0.80; 2.50 mmCut-off (λc)0.08; 0.25; 0.80; 2.50 mmWeight of the evaluation unit1 kgFeed unit width70 mmScanning speed0.2; 0.5; 1 mm/sMeasurement travel for longitudinal sensing26 mmWeight feed unit0.9 kgCut-off (λc)0.003; 0.010; 0.032; 0.100 inEvaluation unit width140 mmBoughness standardsDIN / ISO / JIS / ASME, MOTIF		
Evaluation unit height75 mmFeed unit height50 mmCut-off (λc)0.08; 0.25; 0.80; 2.50 mmWeight of the evaluation unit1 kgFeed unit width70 mmScanning speed0.2; 0.5; 1 mm/sMeasurement travel for longitudinal sensing26 mmWeight feed unit0.9 kgCut-off (λc)0.003; 0.010; 0.032; 0.100 inFouluation unit width140 mmRoughness standardsDIN / ISO / JIS / ASME, MOTIFPower supplyRechargeable battery-powered	Feed unit length	130 mm
Feed unit height50 mmCut-off (λc)0.08; 0.25; 0.80; 2.50 mmWeight of the evaluation unit1 kgFeed unit width70 mmScanning speed0.2; 0.5; 1 mm/sMeasurement travel for longitudinal sensing26 mmWeight feed unit0.9 kgCut-off (λc)0.003; 0.010; 0.032; 0.100 inEvaluation unit width140 mmRoughness standardsDIN / ISO / JIS / ASME, MOTIFPower supplyRechargeable battery-powered	Evaluation unit length	190 mm
Cut-off (λc)0.08; 0.25; 0.80; 2.50 mmWeight of the evaluation unit1 kgFeed unit width70 mmScanning speed0.2; 0.5; 1 mm/sMeasurement travel for longitudinal sensing26 mmWeight feed unit0.9 kgCut-off (λc)0.003; 0.010; 0.032; 0.100 inEvaluation unit width140 mmRoughness standardsDIN / ISO / JIS / ASME, MOTIFPower supplyRechargeable battery-powered	Evaluation unit height	75 mm
Weight of the evaluation unit1 kgFeed unit width70 mmScanning speed0.2; 0.5; 1 mm/sMeasurement travel for longitudinal sensing26 mmWeight feed unit0.9 kgCut-off (λc)0.003; 0.010; 0.032; 0.100 inEvaluation unit width140 mmRoughness standardsDIN / ISO / JIS / ASME, MOTIFPower supplyRechargeable battery-powered	Feed unit height	50 mm
Feed unit width70 mmScanning speed0.2; 0.5; 1 mm/sMeasurement travel for longitudinal sensing26 mmWeight feed unit0.9 kgCut-off (λc)0.003; 0.010; 0.032; 0.100 inEvaluation unit width140 mmRoughness standardsDIN / ISO / JIS / ASME, MOTIFPower supplyRechargeable battery-powered	Cut-off (λc)	0.08; 0.25; 0.80; 2.50 mm
Scanning speed0.2; 0.5; 1 mm/sMeasurement travel for longitudinal sensing26 mmWeight feed unit0.9 kgCut-off (λc)0.003; 0.010; 0.032; 0.100 inEvaluation unit width140 mmRoughness standardsDIN / ISO / JIS / ASME, MOTIFPower supplyRechargeable battery-powered	Weight of the evaluation unit	1 kg
Measurement travel for longitudinal sensing26 mmWeight feed unit0.9 kgCut-off (λc)0.003; 0.010; 0.032; 0.100 inEvaluation unit width140 mmRoughness standardsDIN / ISO / JIS / ASME, MOTIFPower supplyRechargeable battery-powered	Feed unit width	70 mm
Weight feed unit0.9 kgCut-off (λc)0.003; 0.010; 0.032; 0.100 inEvaluation unit width140 mmRoughness standardsDIN / ISO / JIS / ASME, MOTIFPower supplyRechargeable battery-powered	Scanning speed	0.2; 0.5; 1 mm/s
Cut-off (λc)0.003; 0.010; 0.032; 0.100 inEvaluation unit width140 mmRoughness standardsDIN / ISO / JIS / ASME, MOTIFPower supplyRechargeable battery-powered	Measurement travel for longitudinal sensing	26 mm
Evaluation unit width140 mmRoughness standardsDIN / ISO / JIS / ASME, MOTIFPower supplyRechargeable battery-powered	Weight feed unit	0.9 kg
Roughness standardsDIN / ISO / JIS / ASME, MOTIFPower supplyRechargeable battery-powered	Cut-off (λc)	0.003; 0.010; 0.032; 0.100 in
Power supply Rechargeable battery-powered	Evaluation unit width	140 mm
	Roughness standards	DIN / ISO / JIS / ASME, MOTIF
Reversible reading mm / inch	Power supply	Rechargeable battery-powered
	Reversible reading	mm / inch

Interface	USB interface
Interface	Bluetooth interface
Calibration	Q1
Calibration	Q2
Type of product	Surface roughness measuring device
Services	
CalibrationSurface roughness measuring tool Type R	029200 R
CalibrationRoughness standard Type R	029220 R
Accessories	
Thermal paper for types ST1, ST2, H1, S2, M300, M310, M400 Type H1	499510 H1
Clamp	499046
Spare battery ST1, M300, M400	499549
Measuring stand ST-G for roughness measuring instruments with granite plate Type PST-G	498857 PST-G
Stand ST-D	499011